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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/997,391

**Applicant(s)**

NAIMPALLY ET AL.

**Examiner**

James S. Wozniak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,17-19 and 24 is/are allowed.
- 6) ☒ Claim(s) 1,5,6,9-16 and 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. In response to the office action from 12/27/2006, the applicants have submitted an amendment, filed 3/22/2007, amending independent claims 1, 11, and 15, while arguing to traverse the art rejection based on the added limitation regarding prompting a user to select time information corresponding to a section of stored EPG data to be extracted (*Amendment, Pages 11-12*). The applicants' arguments have been fully considered, however the previous rejection is maintained due to the reasons listed below in the response to arguments.

### *Response to Arguments*

2. Applicants' arguments have been fully considered but they are not persuasive for the following reasons:

With respect to independent **claims 1, 11, and 15**, the applicants argue that Chang (*U.S. Patent Application Publication: 2004/0168187*) fails to teach prompting a user to select time information corresponding to a section of stored EPG data to be extracted (*Amendment, Pages 11-12*). The applicants further argue that Chang only announces EPG data that has already been extracted, i.e. information that is currently displayed, which would not involve prompting a user for time information corresponding to EPG voice data yet to be extracted (*Amendment, Page 11*).

In response, the examiner notes that prompting the user to select time information corresponding to a section of stored EPG voice data to be extracted is taught by the Chang reference. More specifically, Chang discloses an EPG listing of an ordered sequence of television programs based on time (*Fig. 5*). This time information, besides being displayed as a menu selection prompt, is also output vocally (*Paragraph 0032*). Each of the instances of time information provided to a user corresponds to a particular program. By responding to the vocal time information, the user can select a corresponding program in the guide mode and receive further information about that program (*i.e., stored EPG data to be extracted*) (*entering a further EPG screen that provides fully identified program information in a guide mode, Paragraph 0032 and 0021; Fig. 3*). Thus, since Chang teaches that a user can access more detailed EPG voice data (*stored EPG data to be extracted*) in response to time-based prompts, Chang teaches the aforementioned claim limitation.

The dependent claims are argued as further limiting rejected independent claims (*Amendment, Pages 12-13*). In regards to such arguments, see the above response directed towards claims 1, 11, and 15.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claim 15** is rejected under 35 U.S.C. 102(e) as being anticipated by Chang (*U.S. Patent Publication: 2004/0168187*).

With respect to **Claim 15**, Chang discloses:

A memory device (voice data and guide memory, paragraph [0020] and Fig. 2, Elements 42 and 44);

A modem adapted to connect to a network (*communications interface to communicate with a network to receive EPG data, Paragraph [0020]; and Fig 2, Element 38*);

A processor coupled to the modem (*DSP and microcontroller, Fig. 2, Elements 40 and 46*) for (a) communicating on the network (*network communication of EPG data, Paragraphs [0034-0037]*), (b) periodically receiving electronic program guide (EPG) speech files from the network (*daily reception of EPG voice data, Paragraph [0034]*), (c) storing the EPG speech files in the memory device (*storing EPG voice data to a voice memory, Paragraph [0020]*), and (d) providing a sequence of aural navigation prompts to a user, prompting the user to select time information corresponding to a section of the stored EPG data to be extracted (*chronological sequence listing of available television programs, more detailed EPG data provided upon selection of a program based on time in a guide mode, and associated EPG voice data, Paragraphs [0021 and 0031-0032] and Figs. 3-5*);

A receiver for accepting input commands from a remote control, the input commands entered responsive to the sequence of aural navigation prompts (*receiving controller keypad commands at a microcontroller to select a particular television program, Paragraph [0027]*);

An audio speaker configured with the processor to present the sequence of aural

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navigation prompts (*speaker, Fig. 2, Element 14*); and

The processor responsive to the input commands accepted by the receiver for (a) extracting a portion of the EPG speech files stored in the memory device (*selecting voice messages corresponding to television programs, Paragraph [0032]*), (b) sending the extracted portion of the EPG speech files to the audio speaker (*sending an EPG voice message to a speaker, Paragraph [0032]*), the portion of the EPG speech files corresponding to a particular time interval (*EPG voice data corresponding to a time interval for a particular TV program, Figs. 3 and 5*).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 10-14, 16, and 22-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Hong et al (*U.S. Patent: 5,737,030*).

With respect to **Claims 1 and 11**, Chang recites:

(a) Storing electronic program guide (EPG) data in a database at the remote location (*server capable of EPG text data storage, Fig. 6, Element 86; and Paragraph [0034]*);

(b) Storing EPG speech files (*server capable of EPG voice data storage, Fig. 6, Element 86; and Paragraph [0034]*);

(c) Receiving a request for a portion of the EPG speech files from step (b), the portion of the EPG speech files corresponding to a particular time interval (*request for EPG text and voice data corresponding to a particular day, Paragraph [0034]*);

(d) Retrieving the requested portion from the stored EPG speech files and transmitting to the information appliance the portion of the EPG speech files requested in step (c) (*transmission of EPG voice data to a user device, Paragraph [0034]; and Fig. 6*);

(e) Receiving and storing the portion of the EPG speech files in the information appliance transmitted in step (d) (*receiving and storing EPG voice data at a user device, Paragraph [0020]*);

(f) Presenting a sequence of aural prompts to a user, prompting the user to select time information corresponding to a section of the stored EPG data to be extracted (*chronological sequence listing of available television programs, more detailed EPG data provided upon selection of a program based on time in a guide mode, and associated EPG voice data, Paragraphs [0021 and 0031-0032] and Figs. 3-5*);

(g) Navigating through the stored EPG speech files in the information appliance, responsive to the aural prompts, to extract a section of the stored EPG speech files (*receiving controller keypad commands at a microcontroller to navigate available television programs, Paragraph [0027-0031]; and presenting EPG voice data prompts corresponding to a particular television program, Paragraph [0032]*); and

(h) Presenting the extracted section of the stored EPG speech files extracted in step (g) through audio speakers (*announcing an EPG voice message using a speaker, Paragraph [0032]*).

Although Chang suggests that EPG voice data is converted from EPG information (*Paragraph [0034]*), Chang does not specifically disclose that EPG voice data is generated from EPG text using a text-to-speech synthesizer, however Hong teaches the generation of EPG voice data using such a synthesizer (*Col. 7, Lines 1-16*). Hong also teaches the use of a set top box for receiving and storing EPG data (*Col. 7, Lines 17-21*), while Chang discloses a mean for communicating EPG data between a controller and other devices (*Paragraph [0037]*; and *set top box, Paragraph [0002]*).

Chang and Hong are analogous art because they are from a similar field of endeavor in EPG voice data providing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Chang with the voice synthesizer taught by Hong in order to implement a well-known and readily available means for automatically generating EPG voice data (*Hong, Col. 7, Lines 1-16*) that provides an illiterate or vision impaired individual with program specific audio information (*Hong, Col. 2, Lines 40-43*).

With respect to **Claim 10**, Chang further discloses:

Transmitting to the information appliance the portion of the EPG speech files at a periodic interval of time (*daily transmission of EPG voice data, Paragraph [0034]*); and

Storing the transmitted portion of the EPG speech files in a memory device of the information appliance (*storing EPG voice data in a voice memory, Paragraph [0020]*).

With respect to **Claim 12**, Chang further discloses:

Receiving the EPG audio data at periodic time intervals (*daily transmission of EPG voice data, Paragraph [0034]*).

With respect to **Claim 13**, Chang further discloses an EPG voice message that includes a



channel number, channel name, and program name (*Paragraph [0032]*), while Hong discloses voice synthesizing EPG data including time information (*Col. 7, Lines 1-16*) and outputting EPG data upon changing a cursor position (*Col. 6, Line 40- Col. 7, Line 16*), which would inherently pause audio data from a previously selected program to output audio data for a currently selected program because Hong notes that vocal EPG data is presented at the same time as displayed EPG text data (*Col. 7, Lines 29-35*).

With respect to **Claim 14**, Chang further discloses:

Presenting the EPG audio data by announcing at least a channel and selecting the channel for one of listening and viewing (*announcing a channel name and number, Paragraph [0032]; and channel selection, Paragraph [0027]*).

With respect to **Claim 16**, Chang discloses the system for receiving, storing, and playing EPG voice data as applied to Claim 15. Chang further recites a server capable of EPG text/voice data storage and transmission (*Fig. 6, Element 86; and Paragraph [0034]*). Although Chang suggests that EPG voice data is converted from EPG information (*Paragraph [0034]*), Chang does not specifically disclose that EPG voice data is generated from EPG text using a text-to-speech synthesizer, however Hong teaches the generation of EPG voice data using such a synthesizer (*Col. 7, Lines 1-16*).

Chang and Hong are analogous art because they are from a similar field of endeavor in EPG voice data providing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Chang with the voice synthesizer taught by Hong in order to implement a well-known and readily available means for

automatically generating EPG voice data (*Hong, Col. 7, Lines 1-16*) that provides an illiterate or vision impaired individual with program specific audio information (*Hong, Col. 2, Lines 40-43*).

With respect to **Claims 22-23**, Chang further discloses:

Presenting a sequence of prompts in text form corresponding to the sequence of aural prompts (*sequence of program selection prompts, Figs. 4-5*).

7. **Claims 5 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Hong et al and further in view of Oh (*U.S. Patent: 6,141,642*).

With respect to **Claims 5 and 20**, Chang in view of Hong discloses the system for receiving, storing, and playing EPG voice data utilizing text-to-speech synthesis, as applied to Claims 1 and 16. Chang in view of Hong does not teach speech synthesizers associated with different languages, however, Oh shows:

Converting the text files into speech files using a first text-to-speech (TTS) synthesizer and a second TTS synthesizer, whereby the first TTS synthesizer and the second TTS synthesizer use different languages (*Fig. 2, Elements 212 and 214*).

Chang, Hong, and Oh are analogous art because they are from a similar field of endeavor in voice data providing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Chang in view of Hong with the use of multiple TTS synthesizers corresponding to different languages as taught by Oh in order to provide text-to-speech synthesis for text that appears in multiple languages (*Oh, Col. 1, Lines 49-52*).

8. **Claims 6 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Hong et al and further in view of Van Kommer (*U.S. Patent: 6,678,659*).

With respect to **Claims 6 and 21**, Chang in view of Hong discloses the system for receiving, storing, and playing EPG voice data utilizing text-to-speech synthesis, as applied to Claims 1 and 16. Chang in view of Hong does not teach the ability to select a synthesized voice from a plurality of speech synthesis voice personalities, however Van Kommer discloses such a selection ability (*Col. 7, Lines 16-27*).

Chang, Hong, and Van Kommer are analogous art because they are from a similar field of endeavor in voice data providing services. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Chang in view of Hong with the ability to select a synthesized voice from a plurality of voice personalities as taught by Van Kommer in order to allow a user the option of selecting a more suitable synthesized voice (*Van Kommer, Col. 7, Lines 25-27*).

9. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Hong et al and further in view of Cannon et al. (*U.S. Patent: 6,510,209*).

With respect to **Claim 9**, Chang in view of Hong discloses the system for receiving, storing, and playing EPG voice data utilizing text-to-speech synthesis, as applied to Claims 1 and 16. Chang in view of Hong does not teach presenting configuration prompts to a user and implementing a predetermined input time period after issuing such a prompt, however, Cannon discloses:

(i) Presenting set-up configurations sequentially through the audio speaker (*Fig. 4*,

*Element 412);*

(j) Pausing the audio presented in step (i) between each set-up configuration (*waiting a predetermined time period for an input command, Col. 6, Lines 4-15*); and

(k) Waiting a predetermined time period during each pause to receive an input command (*waiting a predetermined time period for an input command, Col. 6, Lines 4-15*).

Chang, Hong, and Cannon are analogous art because they are from a similar field of endeavor in voice data interfaces. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Chang in view of Hong with the use of set-up configuration prompts and a predetermined time period for inputting a configuration command as taught by Cannon in order to allow a user to conveniently configure a device from a remote location (*Cannon, Col. 1, Line 66- Col. 2, Line 2*) while only accepting commands for a predetermined time period to prevent an unintended input from being improperly recognized as a command.

#### ***Allowable Subject Matter***

10. **Claims 3-4, 17-19, and 24** are allowable over the prior art of record.

11. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 3 and 17**, the prior art of record fails to explicitly teach or fairly suggest, either alone or in combination, a method and system for presenting synthesized speech corresponding to electronic program guide (*EPG*) text, wherein a server converts an *EPG* text into speech (*specification, paragraph [0020]*), stores the speech files (*specification, paragraph*

[0033]), receives a request for a portion of the EPG text and associated speech for a specific time interval (*specification, paragraphs [0041-0042 and 0050]*), and transmits the EPG text and the associated speech files to a user's set top box for storage (*specification, paragraph [0041]*) and playback via navigation through aural prompt responses (*specification, paragraphs [0041-0042 and 0046]*) in combination with the additional step/means for downloading, at a set top box, additional EPG text and associated speech data from a server in response to a cursor location on an EPG grid (*specification, paragraphs [0048-0049]*).

**Claims 4, 18-19, and 24** further limit an allowable independent claim, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hickey (*U.S. Patent: 5,475,835*)- discloses the ability of a user to browse EPG voice data using time information.

Wymore et al (*U.S. Patent: 6,456,978*)- discloses an interactive EPG system that allows a user to search for a program at a given time.

Junqua et al (*EP 1033701 A2*)- discloses an interactive EPG system that prompts a user for time information for a particular program.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak  
5/16/2007

  
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SUPERVISORY PATENT EXAMINER